Amendments to the Claims:

1. (currently amended) A rigid, high strength tube formed of fiber-reinforced thermoplastic material for permanent installation as a cooling duct for a resin-encapsulated transformer coil of the type having a conductive sheet material wound in a plurality of layers about a central axis and encapsulated by a resin, the tube having an elliptical cross-section with a linear dimension and a width, the linear dimension being greater than the width, wherein when installed said tube defines a cooling passage that is substantially parallel to the central axis and ~~the tube~~ is thermally and electrically compatible with the resin used to encapsulate the transformer coil.

2. (currently amended) The tube of Claim 1, wherein the thermoplastic material is polyester ~~an epoxy resin~~.

3. (canceled)

4. (currently amended) A dry-type, resin-encapsulated transformer coil, comprising:

(a) a plurality of layers formed from a continuous length of conductive sheet material wound about a central axis;

(b) a plurality of cooling ducts, said cooling ducts formed of thermoplastic material and placed between the plurality of layers of conductive sheet material along paths that are transverse to the length of the sheet material and parallel to the central axis, wherein each of the plurality of cooling ducts defines a cooling passage that is parallel to the central axis; and

(c) a resin encapsulating the plurality of layers of conductive sheet material and surrounding each of the plurality of cooling ducts, wherein the plurality of cooling ducts and the resin-encapsulated layers are thermally and electrically compatible.

5. (currently amended) The transformer coil of Claim 4, wherein the thermoplastic material is polyester ~~an epoxy resin~~.

6-11. (canceled)

12. (new) The tube of Claim 1 wherein the length to width ratio is about 3:1.

13. (new) The tube of Claim 1 wherein the tube has an ultimate tensile strength of about 30,000 psi longitudinally, 6,500 psi transverse when tested in accordance with ASTM D-638, "Standard Test Method for Tensile Properties of Plastics."

14. (new) The tube of Claim 1 wherein the tube has an ultimate compressive strength of about 30,000 psi longitudinally, 10,000 psi transverse when tested in accordance with ASTM D-695, "Standard Test Method for Compressive Properties of Rigid Plastics."

15. (new) The tube of Claim 1 wherein the tube has an ultimate flexural strength of about 30,000 psi longitudinally, 10,000 psi transverse when tested in accordance with ASTM D-790, "Standard Test Method for Flexural Properties of Unreinforced and Reinforced Plastics and Electrical Insulating Materials."

16. (new) The tube of Claim 1 wherein the tube has a modulus of elasticity of about 2.5E6 psi longitudinally when tested in accordance with ASTM D-149, Standard Test Method for Dielectric Breakdown Voltage and Dielectric Strength of Solid Electrical Insulating Materials at Commercial Power Frequencies."

17. (new) The tube of Claim 1 wherein the tube has an electrical strength short time (in oil) of about 200 V/mil (perpendicular) and 35 kV/inch (parallel) when tested in accordance with ASTM D-149, Standard Test Method for Dielectric Breakdown Voltage and Dielectric Strength of Solid Electrical Insulating Materials at Commercial Power Frequencies."

18. (new) The tube of Claim 1 wherein the tube has a thermal conductivity of at least about 4 Btu/(hr*ft²*°F/in).